07/03/98

JUNE ACTIVITY REPORT
JULY 1 MEETING MINUTES

Report on Meetings

Naser Bateni reported that the first TAG meeting went well. However, the group wanted more information sooner than previously planned. Detailed activity presentations are now scheduled as follows: July 22, Project Engineering, Geology and Sacramento River Diversions; September 1, Environmental Studies.

Naser Bateni presented Attachment 1 which is a listing of TAG members.

CALFED Report

Dave Samson presented the schedule of activities listed in Attachment 2. A CALFED workshop on conveyance and storage facilities will be held on 7/21/98, 0900 in the Resource Building Auditorium.

Reports Discussion

Glyn Echols reviewed the report schedule shown in Attachment 3.

Field Work Issues

Fire season is upon us. We must be very careful to prevent fires. Vehicles should have ABC fire extinguishers and shovels. Unit supervisors are responsible for seeing that each unit is equipped with these items. Personal safety is also important. Take plenty of water and first aid kits with you in the field. We have not received a response from our request for cell phones.

Property access is going well. Remember to coordinate access through Don Schroeder.

UNIT REPORTS

Project Engineering

Shawn Pike presented information regarding possible diversions and tunnels from East Park Reservoir to Sites Reservoir. Shawn will have a completed report (subject to DOE review) by mid-July. See Attachment 4.

Geology

We have completed drilling at Sites Damsite. We drilled a total of four diamond core holes and three auger holes. As expected, foundation rocks intersected by the core holes generally looked good. Two faults and a number of shear zones were intersected. Water pressure testing of the core holes show low to medium water

"takes." Overall, our preliminary assessment is that the foundation rocks are adequate for the proposed structure and that foundation leakage will not be a problem.

We are completing the first channel hole at Golden Gate Damsite this week. Two more diamond core and three auger channel holes are planned. Sutter Yard is repairing an access road damaged by heavy rains and streamflow this winter. Access to the two planned abutment holes is on hold pending environmental clearance.

The fault investigation, Phase I, is nearly complete. Phase I consists of literature review, compiling earthquake activity, and determining the design earthquake. Phase II, consisting of trenching across faults, will begin later this summer.

Samples sent to the laboratory indicate that the construction materials are in adequate quality and quantity for the proposed structure.

Dave Forwalter presented Attachment 5 as a summary of field activities.

Water Quality

Monthly water quality sampling continues. Although several parameters have been found above water quality goals in several tributaries, water quality has not been calculated for the proposed reservoirs. This will be done by using historical flow data for the tributaries and estimated inflow from other sources (Tehama-Colusa Canal, etc.).

Curt Babcock reported that the water sampling for low flows is almost complete. The major part of future sampling will be during the next winter when flows are once again high. Curt is to coordinate with Project Engineering on the projection of concentration of these parameters in the Reservoir.

Cultural Resources

All record searches for previously recorded sites have been completed for storage alternatives and conveyance facilities.

Except for 1-2 more survey days in October (when Cottonwood Creek is fordable), work on the archaeological site survey at Dippingvat, Lanyan, and Bluedoor is finished. We anticipate work at Schoenfield will be completed sometime in early August.

(The Amendment to the Interagency Agreement and the Task Order with DPR should be signed off by August. This will give us 2-3 additional crew.)

The survey effort will then shift to the Sites and Colusa projects. Survey fieldwork will continue to completion through the winter months. Work on the memo progress report to Naser will start in early August and will be ready by August 31. We expect to have all field surveys and the first draft of the final report completed by late February.

Bob Orlins reported at this time that he has not encountered any project stoppers nor does he anticipate any.

Wetlands

All preliminary wetland delineations for the Thomes-Newville and Sites-Colusa

Reservoir Sites have been completed. The data sheets for these sites are currently being finalized. The final wetland maps are more than 75% completed for Thomes-Newville and about 30% completed for Sites-Colusa. Wetland delineations for the wetlands within the Red Bank Project will be completed by mid-July. Field measurements of all "Waters of the US" which do not contain wetland areas should be completed by July 2. I will meet with Brad Hubbard on July 23 to discuss the status of our studies (Brad is the Army Corps of Engineers regulatory staff person for Colusa, Tehama and Glenn Counties). We are attempting to have all acreage calculations completed by July 31.

Joyce Lacey presented Attachment 6. She also reported at this time that she has not encountered any project stoppers nor does she anticipate any.

Sensitive Vegetation

Rare plant surveys and botanical inventory have covered approximately eighty percent of the Sites-Colusa and Thomes Newville reservoirs. Approximately sixty percent of the Red Bank sites have been surveyed. Seasonal surveys are finished for thirty of the sixty-two rare or watch-list plant species with potential for occurring in the project areas. The rare plant surveys for the remaining thirty-two species will continue through the end of September to encompass the blooming and identification periods for these species. Numerous new populations of the following plant species have been identified within the reservoirs;

Antirrhinum subcordatum	Di-morphic Snapdragon	List 1B
Astragalus rattanii var. jepsonianus	Jepson=s milkvetch	List 1B
Fritillaria pluriflora	Adobe lily	List 1B
Hesperolinon tehemense	Tehama County western flax	List 1B
Navarettia eriocephala	Hoary navarettia	List 4
Navarettia heterandra	Tehama navarettia	List 4

Vegetation/plant community data is currently being entered into GIS format. Vegetation community types have been field proofed for Sites-Colusa and Thomes-Newville reservoirs. Red Bank vegetation community field proofing is in progress. Upon completion of the field proofing the data will all be entered into the database to provide reservoir acreage summaries of the plant communities impacted by inundation.

Joyce Lacey presented Attachment 7.

Invertebrates

The reconnaissance level assessment of potential habitat area for listed vernal pool invertebrate species at the four off-stream storage sites is complete and the final report has been submitted.

No significant habitat is present at the Red Bank location. Approximately 26 acres of potential habitat were mapped at the Thomes-Newville site, 12 acres at the Colusa project, and 73 acres at the Sites reservoir location (85 acres for the combined Sites/Colusa project).

The highest quality, non-degraded contiguous potential habitat is located at the Thomes-Newville area. A greater amount of habitat occurs at the Sites location, but this area has been more severely impacted by land use and erosion patterns.

The study has concluded that, based strictly upon total available habitat acreage, the Sites project will have the greatest impact of the four alternatives.

Fraser Sime presented the Jones and Stokes report which is Attachment 8.

Wildlife (Mammals)

DFG is currently in the process of conducting small mammal trapping using Sherman ® live traps (for the capture and identification of rodent species such as the Marysville California kangaroo rat and the San Joaquin pocket mouse); bat trapping using mist nets (for the capture and identification of bats); echolocation surveys using an Anabat II, Zero-Crossing Analysis Interface Module, and a laptop computer; and limited spotlight surveys to detect species such as the American badger. These are the four primary survey methods currently being used by DFG staff to collect data on special status species. All other incidental sightings while conducting surveys will also be recorded and included in the September 1998 report.

Efforts are occurring one week per month for each of the four proposed reservoir sites. Other work efforts are research and discussion with the U.S. Fish and Wildlife Service to get agency backing to revise the initial list submitted to Mr. Naser Bateni. All field efforts will continue through April or May of 1999.

Brad Burkholder reported at this time that he has not encountered any project stoppers nor does he anticipate any.

Wildlife (Birds)

See Attachment 9.

Dave Bogener reported at this time that he has not encountered any project stoppers nor does he anticipate any.

Wildlife (Elderberries)

Surveys and mapping of elderberries continued during the month of June. Work was begun on Thomes/Newville Reservoir and continued at Dippingvat. Elderberry bushes are present at all reservoir sites. However, only one site has been mapped at Colusa Reservoir with 90% of the area surveyed. Emergent holes are present on some plants at Sites but in low numbers. The percentage of area covered for each reservoir is listed below. Field work should conclude in August.

Sites	90% surveyed	+300 stems
Colusa	90% surveyed	+38 stems
Thomes	70% surveyed	+300 stems
Red Bank	25% surveyed	+400 stems

Amphibians & Reptiles (T&E)

Amphibian and reptile surveys will continue at Sites-Colusa and Red Bank. No red-legged frog was seen at Sites-Colusa, but one partially transformed juvenile red-legged frog was seen at Red Bank. A few Pacific pond turtles have been seen at Sites-Colusa this spring. In contrast, observers have seen Pacific pond turtles nearly every day they survey at Red Bank. No foothill yellow-legged frog has been seen at Sites-Colusa, but they are abundant at Red Bank. No western spadefoot toad or horned lizard has been seen. Field surveys will continue through June 1999 to satisfy USFWS protocols.

Charlie Brown informally ranked the projects as Red Bank being the highest quality, then Thomes-Newville, and then Sites-Colusa having the least quality of habitat.

Fish

Streamflow at Sites-Colusa and Red Bank is still too high for fish sampling. At this time, we estimate that sampling will begin on Sites-Colusa about mid-July. The South Fork of Cottonwood Creek and Thomes Creek are too high for diving surveys for Spring-run Chinook salmon. Spring-run surveys begin in August.

Sacramento River Conveyance Engineering

The list of conveyance alternatives was finalized in June after meeting with staff from Northern District. A total of 16 alternatives will be presented in a matrix format that will display the components of the alternatives including diversion facilities, canal reaches, and pumping plants.

Staff continues to refine the design and cost of the components and meet with DOE staff to review the cost analysis for the different pumping plants. CD staff will incorporate the cost of the pumping plants and diversion/fish screen facilities into the alternatives when DOE and ESO complete them, respectively. Staff prepared a draft outline of the memo report and documentation that will be completed by August 31.

Al Lind presented Attachment 10. Discussion regarding assistance from DOE and the alternatives to be presented in the final report were extensive. A follow-up meeting was scheduled for July 2, 1998 with Central District and CALFED.

Sacramento River Fisheries

ESO staff conducted reconnaissance surveys of the Colusa Basin Drain to determine the likelihood of the need to screen a diversion from the Colusa Basin Drain. The goals were to determine 1) whether there is hydraulic continuity between the Sacramento River and the Colusa Basin Drain for fish migrating upstream and 2) whether there is suitable habitat for sensitive fish species upstream. We surveyed from the Yolo Bypass to Knights Landing Ridge Cut to the Colusa Basin Drain and found that fish would be able to migrate upstream to the Drain. The Colusa Basin Drain gets its water from tributaries that flow into them, some of which are spring-fed, from the

Glenn-Colusa Irrigation District Canal directly through outlets into channels that lead to the Drain and from return flow from agriculture and the wildlife refuges. Chinook salmon have been seen over the years in the upper Colusa Basin Drain and tributaries. Future investigations should include some sampling for adult and juvenile chinook salmon in the upper reaches and splittail in the lower reaches.

ESO staff continues to contact DFG, USFWS, and Reclamation District staff about the occurrence and origin of Chinook salmon in the Colusa-Basin Drain and its tributaries. DFG has documented 140 unscreened diversions occurring from Knight's Landing to Red Bluff. Many of these fall within the stretch of the Colusa-Basin Drain. DFG staff indicated that these diversions regularly pull young chinook salmon out of the Sacramento River and these fish can end up in the Drain. Consequently, DFG-IFD recommended proposing a screen for any diversion within the Colusa-Basin Drain. Adults found within the Colusa-Basin Drain could be strays from the Sacramento River or returning adults for a self-sustaining run.

ESO staff visited the PCGID/PID screen construction site and finished conceptual drawings using this type of screen for the on-river part of the potential Sacramento River diversion site at Moulton Weir or Chico Landing. Randy Beckwith presented Attachment 11. Staff visited the potential diversion site at the Moulton Weir on the Sacramento River. Staff met with Art Bullock (TCCA) concerning the Red Bluff diversion site and discussed the possibility of a new screen at this location.

Agenda

Attachment 12.

Attendance Sign-In

Attachment 13.